

# RESERVE COPY

## PATENT SPECIFICATION

361,802

Application Date: April 17, 1931. No. 11,367 / 31.

Complete Left: May 21, 1931.

Complete Accepted: Nov. 26, 1931.

### PROVISIONAL SPECIFICATION.

#### Improvements in or relating to Fire Hydrant and Associated Hose Reel Apparatus.



We, S. DIXON AND SON, LIMITED, a Company organised under the laws of Great Britain, and CLIFFORD DIXON, a British subject, both of 20, Swinegate, Leeds, in the County of York, do hereby declare the nature of this invention to be as follows:—

This invention relates to fire hydrant and associated hose reel apparatus, the chief object being to provide means for obviating the possibility of a person taking the nozzle and running out the reel of hose without first turning on the water supply.

According to the invention, the hose nozzle is mounted on or connected to the cock or valve of the reel in such a manner that its removal or disconnection therefrom automatically causes said cock or valve to be turned on. Thus, the hose nozzle may be adapted to serve as a turn key mounted on the spindle of the cock or valve; bayonet slot and pin mechanism or other appropriate means being provided for preventing removal of the hose nozzle until it has been turned sufficiently to open the cock or valve and thereby turn on the water supply. The hose will fill as it is being run out to the scene of the fire and the water will be ejected immediately the usual cock or valve associated with the nozzle is turned on.

In an embodiment of the invention, the hose nozzle is provided or formed with a

right angularly disposed socket member which is adapted to take over and fit the end of the spindle of the cock or valve in the manner of an ordinary turn-key for operating the valve. In order to prevent removal of the hose nozzle until it has been turned so as to fully open the cock or valve, the body of the valve or cock may be fitted with a cylindrical housing surrounding the projecting end of the spindle and the engaging socket member of the nozzle and affording a lateral inwardly directed flange beneath or behind which a lateral outwardly extending projection on the socket member engages or moves during rotation of the nozzle until said projection is brought into alignment with a cut-out or recess in said lateral flange, whereupon the socket member can be pulled off the spindle. The position of the cut-out or recess in the flange may be such that the valve or cock will be full on when the nozzle has been rotated to bring the projection on its socket member into alignment with the said cut-out or recess. An "on" and "off" indicator plate may be provided on the cock or valve body.

Dated this 16th day of April, 1931.

S. DIXON AND SON LIMITED,  
CLIFFORD DIXON,  
Per John E. Walsh & Co.,  
7, East Parade, Leeds, and at Halifax,  
Agents for Applicants.

### COMPLETE SPECIFICATION.

#### Improvements in or relating to Fire Hydrant and Associated Hose Reel Apparatus.

We, S. DIXON AND SON, LIMITED, a Company organised under the laws of Great Britain, and CLIFFORD DIXON, a British subject, both of 20, Swinegate, Leeds, in the County of York, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

[Price 1/-]

This invention relates to fire hydrant and associated hose reel apparatus, the chief object being to provide new or improved means for obviating the possibility of a person taking the nozzle and running out the reel of hose without first turning on the water supply.

According to the invention, the hose nozzle is adapted to serve as a turn key mounted on or connected to the cock or

valve of the reel in such a manner that it cannot be removed or disconnected therefrom without automatically turning on said cock or valve. Thus, the hose nozzle adapted to serve as a turn key may be mounted on the spindle of the cock or valve, bayonet slot and pin mechanism or other appropriate means being provided for preventing removal of the hose nozzle until it has been turned sufficiently to open the cock or valve and thereby turn on the water supply. The hose will fill as it is being run out to the scene of the fire and the water will be ejected immediately the usual cock or valve associated with the nozzle is turned on.

In order that the invention may be clearly understood and readily carried into effect, the same will now be more fully described with reference to the embodiment illustrated in the accompanying drawings; wherein:—

Figures 1 and 2 are respectively a part sectional side elevation and a plan view of a fire hydrant cock and associated nozzle of a hose reel apparatus (not shown).

Referring to the drawings, the hose nozzle 1 is formed with a right-angularly disposed socket member 2 which is adapted to take over and fit the end of the spindle 3 of the cock or valve 4 in the manner of an ordinary turn key for operating the valve. In order to prevent removal of the hose nozzle 1 until it has been turned so as to fully open the cock or valve 4, the body of the valve or cock is fitted with a cylindrical housing 5 surrounding the projecting end of the spindle 3 and the engaging socket member 2 of the nozzle 1 and affording a lateral inwardly directed flange 6 beneath or behind which a lateral outwardly extending projection 7 on the socket member 2 engages or moves during rotation of the nozzle 1 until said projection 7 is brought into alignment with a cut-out or recess 8 in said lateral flange 6, whereupon the said nozzle 1 and socket member can be pulled off the spindle 3. The position of the cut-out or recess 8 in the flange 6 is such that the valve or cock 4 will be full on when the nozzle 1 has been rotated to bring the projection 7 on its socket member 2 into alignment with

the said cut-out or recess 8. In this connection inwardly directed projections 9 on the inner wall of the cylindrical housing 5 may be provided, as shown, so as to limit the rotary movement of the nozzle 1 and its socket member 2, by co-operation with the projection 7 on the latter, and determine the on and off positions.

An "on" and "off" indicator plate may be provided on the cock or valve body, or the words "shut" and "open" may be marked in appropriate positions on the cylindrical housing 5 as shown.

After removing the nozzle 1 from the cock or valve 4 and thereby turning on the water supply at that point, the hose is run out and fills during this process so that when the nozzle cock 10 is turned on water is immediately ejected from the nozzle 1.

Having now particularly described and ascertained the nature of our said invention and in what manner the same is to be performed, we declare that what we claim is:—

1. Fire hydrant and associated hose reel apparatus, wherein the hose nozzle is adapted to serve as a turn key mounted on or connected to the cock or valve of the reel in such a manner that it cannot be removed or disconnected therefrom without automatically turning on said cock or valve.

2. Fire hydrant and associated hose reel apparatus according to Claim 1, wherein the hose nozzle adapted to serve as a turn key is mounted on the spindle of the cock or valve and is prevented from being removed therefrom by bayonet joint mechanism until it has been turned sufficiently to open the cock or valve.

3. Fire hydrant and associated hose reel apparatus constructed, arranged and adapted to operate substantially as hereinbefore described with reference to the accompanying drawings.

Dated this 20th day of May, 1931.

S. DIXON AND SON LIMITED,  
CLIFFORD DIXON,

Per John E. Walsh & Co.,  
7, East Parade, Leeds, and at Halifax,  
Agents for Applicants.

[This Drawing is a reproduction of the Original on a reduced scale.]

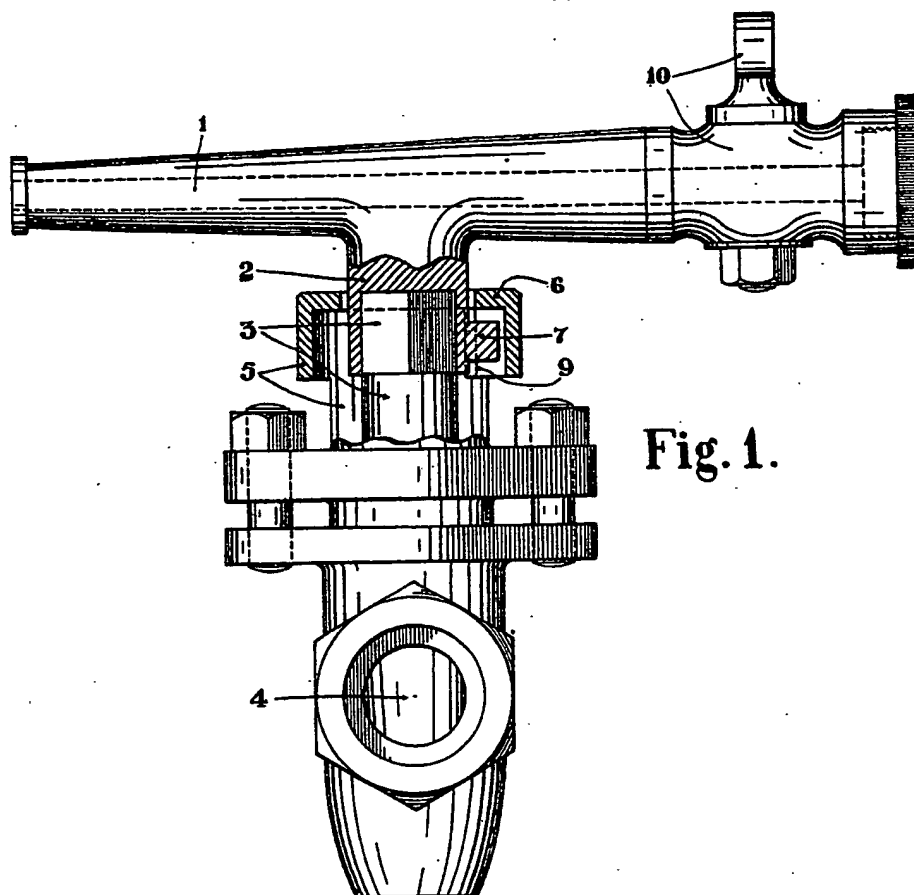


Fig. 1.

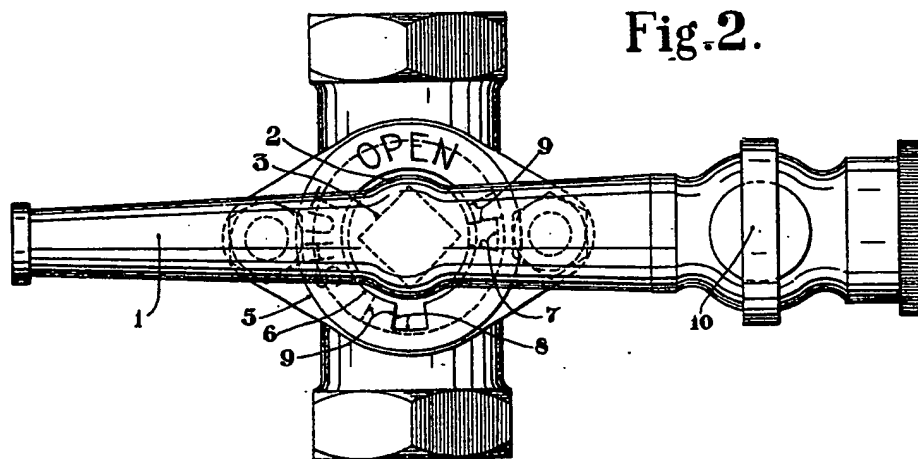


Fig. 2.